



# **PCT**

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

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anslation intern	NATIONAL PRELIMINARY EXAMINATION REPORT
	(PCT Article 36 and Rule 70) 2 3 JAIN 2
Applicant's or agent's file reference 28356P WO	FOR FURTHER ACTION See Notification of Transmittal of Internat Preliminary Examination Report (Form PCT/IPEA/
International application No. PCT/EP2003/008011	International filing date (day/month/year) Priority date (day/month/year)  22 July 2003 (22.07.2003) 24 July 2002 (24.07.2002)
International Patent Classification (IPC A61K 31/495	C) or national classification and IPC
Applicant	WILEX AG
70.16 and Section 607 These annexes consist	t of a total of 3 sheets.  ons relating to the following items:
I Basis of the r	
II Priority  III Non-establish  IV Lack of unity	shment of opinion with regard to novelty, inventive step and industrial applicability
II Priority  III Non-establish  IV Lack of unity  V Reasoned stations and	shment of opinion with regard to novelty, inventive step and industrial applicability  y of invention  atement under Article 35(2) with regard to novelty, inventive step or industrial applicability if explanations supporting such statement
II Priority  III Non-establish  IV Lack of unity  V Reasoned stacitations and  VI Certain docu	shment of opinion with regard to novelty, inventive step and industrial applicability  y of invention  atement under Article 35(2) with regard to novelty, inventive step or industrial applicability if explanations supporting such statement
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## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

## PCT/EP2003/008011

I. Basis of the report									
1. With regard to the elements of the international application:*									
		the international application as originally filed							
	冈	the desc	ription:						
	£3	pages	1-29	, as originally filed					
		pages		, filed with the demand					
		pages	, filed with the letter of						
	$\square$	the clair							
	ZZ			, as originally filed					
		pages .	, as amended (together						
		pages		, filed with the demand					
		pages	1-26, filed with the letter of	14 October 2004 (14.10.2004)					
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		the drav		, as originally filed					
ł		pages		, filed with the demand					
		pages pages	, filed with the letter of						
		the seque	nce listing part of the description:						
		pages							
		pages		, filed with the demand					
		pages	, filed with the letter of						
2.	the i	nternation	o the language, all the elements marked above were available or furnished to the nal application was filed, unless otherwise indicated under this item.  It were available or furnished to this Authority in the following language	is Authority in the language in which which is:					
			guage of a translation furnished for the purposes of international search (under Re	ule 23.1(b)).					
	П		guage of publication of the international application (under Rule 48.3(b)).						
			guage of the translation furnished for the purposes of international preliminary	examination (under Rule 55.2 and/					
3.	Wit prel	h regard iminary e	to any nucleotide and/or amino acid sequence disclosed in the interna xamination was carried out on the basis of the sequence listing:	tional application, the international					
		contair	ned in the international application in written form.						
		1.0							
		furnished subsequently to this Authority in written form.							
	furnished subsequently to this Authority in computer readable form.								
	Ц	interna	tatement that the subsequently furnished written sequence listing does not attached as filed has been furnished.						
	Ш		atement that the information recorded in computer readable form is identical urnished.	to the written sequence listing has					
4.	. $\square$	The an	nendments have resulted in the cancellation of:						
<b>1</b>	-		the description, pages						
		Ħ	the claims, Nos.						
		Ħ	the drawings, sheets/fig						
5.		This re	port has been established as if (some of) the amendments had not been made, s the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**	ince they have been considered to go					
* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70. and 70.17).									
** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.									

#### INTERNATIONAL PROLIMINARY EXAMINATION REPORT

national application No.
PCT/EP 03/08011

NO

v.	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement							
1.	Statement							
	Novelty (N)	Claims	1-26	YES				
		Claims		NO				
	Inventive step (IS)	Claims	1-26	YES				
		Claims	·	NO				
	Industrial applicability (IA)	Claims	1-26	YES				

Citations and explanations

 The documents are numbered according to the order in which they appear in the search report (D1 to D4).
 Unless otherwise indicated, reference is made to the passages from each document cited in the search report.

Claims

### 2. Novelty (PCT Article 33(2))

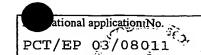
None of the cited documents discloses liposomal formulations with 3-amino- or 3-guanidino-phenylalanine derivatives in a weight proportion of 0.5 to 10%, based on the total weight of the formulation.

Therefore, the subject matter of claim 1 and of dependent claims 2-26 can be considered novel.

#### 3. Inventive Step (PCT Article 33(3))

Document D1 relates to the use of 3-amidinophenylalanine derivatives, including the compound according to the present claim 2 (also known as WX UK1), for treating tumors and metastasis formation. These compounds can also be incorporated into the membranes of liposomes to make it possible to target the active substances (e.g. chemotherapeutics) enclosed in the liposomes (cf. page 14). The tests demonstrating the effectiveness of the substances are carried out with aqueous solutions.

#### INTERNATIONAL PRESIMINARY EXAMINATION REPORT



The problem to be solved by the present application consists in reducing the undesirable side-effects (such as hemolysis and skin irritation) of aqueous solutions containing phenylalanine derivatives that are administered parenterally.

The solution proposed in the present application is that of providing 3-amino- or 3-guanidino-phenylalanine derivatives in liposomal formulations.

The applicant has demonstrated that liposomal formulations containing WX UK1 result in fewer skin irritations and a reduction in the hemolytic effect compared to aqueous solutions.

Therefore, the subject matter of claims 1-26 can be considered inventive.